

Small Arms Ammunition

KNOW WHAT YOU'RE SHOOTING

Editor's Note: This article first appeared in the June 2007 issue of *PS, The Preventive Maintenance Monthly*.

Dear *PS* Editor,

I am a quality assurance specialist ammunition (QASAS) in Iraq and have encountered several problems that Soldiers should be warned about:

- * Soldiers are modifying weapons or using unauthorized weapons. Both practices are prohibited because a modified or unauthorized weapon could be unreliable and unsafe. That endangers the Soldier and his unit.

- * Soldiers are using unauthorized ammo in their weapons. I've found Italian, Romanian, and Yugoslavian ammo in Soldiers' magazines. Some Soldiers didn't even realize they were using unauthorized ammo. Unauthorized ammo can't be relied on and shouldn't be used. Use only the approved ammo you get through the Army supply system.

- * Soldiers should remember to protect ammo as much as possible from the heat and sun, which of course is very difficult in the Iraq desert. The hotter ammo gets, the faster its propellant burns, which means greater pressure inside the weapon. If ammo has been exposed to high heat, let it cool before firing it.

- * The British 5.56mm round should be used only for training with the M16-series rifle, M4/M4A1 carbine and M249 machine gun. In fact, it's good to use for training since that saves U.S. ammo for combat. The British round leaves more powder residue, which causes the weapon to jam if it's not cleaned frequently. The British ammo is stamped on its base with either L2A2 or L1A2. After firing British ammo, clean your weapon and then re-zero it using U.S. ammo. That way you'll hit what you're aiming at!

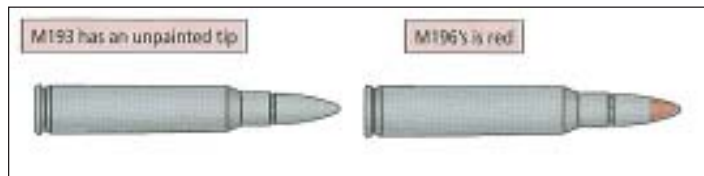


Figure 1



Figure 2

* Many Soldiers don't realize there are different types of ammo for each weapon and that some types work better than others. It would be a good idea for *PS* to educate Soldiers on what ammo is best to use.

— Jeffrey Dykeman
Iraq

PS Editor's Note:

Excellent points, Jeff. Now let's start the education on what Soldiers should use in the M16/M16A1, the M16A2/M16A4 and M4/M4A1, and the M249:

M16/M16A1 (Figure 1)

The M16/M16A1 is designed to shoot M193 (ball) and M196 (tracer) cartridges. Because the M16/M16A1 has a one turn in 12 inches twist, it can't accurately shoot the heavier bullets used in the M16A2/M4-series. You can ID M193 cartridges by the unpainted bullet tips and M196s by their red tips.

M16A2/M16A4, M4/M4A1 (Figure 2)

The M16A2/M16A4 and M4/M4A1 have a one turn in seven inch rifling twist and work best with the M855 (ball) and M856 (tracer) cartridges. If you shoot the M193 or M196 cartridges, your effective range is reduced 16 percent. M855 cartridges have a green tip and M856s have an orange tip.

M249

The M249 also works best with the M855 and M856 cartridges. If you shoot M193 and M196 cartridges, the M249's effective range is reduced from 1,000 meters to 500.

Ammunition information notice (AIN) 88-06 gives the lowdown on 5.56mm ammo. You can find the AIN online at <https://aeps2.ria.army.mil/commodity/ain/jmc/06/ain88-06.html>.